

To: Amanda.McInnis@hdrinc.com;CN=Dave
Moon/OU=R8/O=USEPA/C=US@EPA;CN=Gary
Russo/OU=DC/O=USEPA/C=US@EPA;CN=Janita
Aguirre/OU=DC/O=USEPA/C=US@EPA;CN=Jim
Carleton/OU=DC/O=USEPA/C=US@EPA;CN=Lisa
Larimer/OU=DC/O=USEPA/C=US@EPA;CN=Manjali
Vlcan/OU=DC/O=USEPA/C=US@EPA;MumfordD@ci.billings.mt.us;CN=Phil
Zahreddine/OU=DC/O=USEPA/C=US@EPA;CN=Tonya Fish/OU=R8/O=USEPA/C=US@EPA[];
N=Dave Moon/OU=R8/O=USEPA/C=US@EPA;CN=Gary
Russo/OU=DC/O=USEPA/C=US@EPA;CN=Janita
Aguirre/OU=DC/O=USEPA/C=US@EPA;CN=Jim
Carleton/OU=DC/O=USEPA/C=US@EPA;CN=Lisa
Larimer/OU=DC/O=USEPA/C=US@EPA;CN=Manjali
Vlcan/OU=DC/O=USEPA/C=US@EPA;MumfordD@ci.billings.mt.us;CN=Phil
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N=Gary Russo/OU=DC/O=USEPA/C=US@EPA;CN=Janita
Aguirre/OU=DC/O=USEPA/C=US@EPA;CN=Jim
Carleton/OU=DC/O=USEPA/C=US@EPA;CN=Lisa
Larimer/OU=DC/O=USEPA/C=US@EPA;CN=Manjali
Vlcan/OU=DC/O=USEPA/C=US@EPA;MumfordD@ci.billings.mt.us;CN=Phil
Zahreddine/OU=DC/O=USEPA/C=US@EPA;CN=Tonya Fish/OU=R8/O=USEPA/C=US@EPA[];
N=Janita Aguirre/OU=DC/O=USEPA/C=US@EPA;CN=Jim
Carleton/OU=DC/O=USEPA/C=US@EPA;CN=Lisa
Larimer/OU=DC/O=USEPA/C=US@EPA;CN=Manjali
Vlcan/OU=DC/O=USEPA/C=US@EPA;MumfordD@ci.billings.mt.us;CN=Phil
Zahreddine/OU=DC/O=USEPA/C=US@EPA;CN=Tonya Fish/OU=R8/O=USEPA/C=US@EPA[];
N=Jim Carleton/OU=DC/O=USEPA/C=US@EPA;CN=Lisa
Larimer/OU=DC/O=USEPA/C=US@EPA;CN=Manjali
Vlcan/OU=DC/O=USEPA/C=US@EPA;MumfordD@ci.billings.mt.us;CN=Phil
Zahreddine/OU=DC/O=USEPA/C=US@EPA;CN=Tonya Fish/OU=R8/O=USEPA/C=US@EPA[];
N=Lisa Larimer/OU=DC/O=USEPA/C=US@EPA;CN=Manjali
Vlcan/OU=DC/O=USEPA/C=US@EPA;MumfordD@ci.billings.mt.us;CN=Phil
Zahreddine/OU=DC/O=USEPA/C=US@EPA;CN=Tonya Fish/OU=R8/O=USEPA/C=US@EPA[];
N=Manjali Vlcan/OU=DC/O=USEPA/C=US@EPA;MumfordD@ci.billings.mt.us;CN=Phil
Zahreddine/OU=DC/O=USEPA/C=US@EPA;CN=Tonya Fish/OU=R8/O=USEPA/C=US@EPA[];
umfordD@ci.billings.mt.us;CN=Phil Zahreddine/OU=DC/O=USEPA/C=US@EPA;CN=Tonya
Fish/OU=R8/O=USEPA/C=US@EPA[]; N=Phil
Zahreddine/OU=DC/O=USEPA/C=US@EPA;CN=Tonya Fish/OU=R8/O=USEPA/C=US@EPA[];
N=Tonya Fish/OU=R8/O=USEPA/C=US@EPA[]
Cc: gemathieus@mt.gov;CN=Johanna
Miller/OU=R8/O=USEPA/C=US@EPA;msuplee@mt.gov;CN=Ron
Steg/OU=MO/OU=R8/O=USEPA/C=US@EPA[]; N=Johanna
Miller/OU=R8/O=USEPA/C=US@EPA;msuplee@mt.gov;CN=Ron
Steg/OU=MO/OU=R8/O=USEPA/C=US@EPA[]; suplee@mt.gov;CN=Ron
Steg/OU=MO/OU=R8/O=USEPA/C=US@EPA[]; N=Ron
Steg/OU=MO/OU=R8/O=USEPA/C=US@EPA[]
From: CN=Tina Laidlaw/OU=MO/OU=R8/O=USEPA/C=US
Sent: Wed 6/22/2011 9:12:10 PM
Subject: Discussion of the Billings MT Case Study on the City's demonstration of Economic Hardship

Last week, I had the opportunity to speak with Dave Mumford, Public Works Director for the City of Billings. The City of Billings has taken a very progressive approach to dealing with water and wastewater management -- developing a city-wide integrated water management plan. The City is also trying to consider options for addressing Montana's draft numeric nutrient criteria in their WWTP facility plan. Last

week, Dave and Amanda McInnis, HDR Engineer, spoke with MTDEQ about different treatment technologies, costs related to %MHI and EPA's 2% threshold, and some possible creative alternatives.

Billings discharges into the Yellowstone River which is listed as impaired for nutrients. The WWTP discharges 26 MGD and will need to meet the criteria for the Yellowstone End of Pipe. Rate-payers currently pay <0.5% towards wastewater fees and the city is strong economically. Looking at numbers alone, the city may be able to "afford" RO and barely exceed a 2% threshold. If they look at a 5-stage Barrdenpho plant, they are looking at treating to about 5-6 mg/l TN (still above the criteria) and ratepayers would pay ~\$90 month towards wastewater. They don't think they'll be able to get approval for this approach. Non-treatment options being considered include: keeping their water out of the river during the growing season by spray irrigating with the discharge or send the WWTP discharge to the irrigation canal to reduce the flow diverted from the river for irrigation (currently 500 cfs).

I thought it would be educational for us to have a call with the City and to understand the issues they are facing. Amanda and Dave will send out some summary materials prior to our discussion. Please let me know if you're interested and willing to discuss this issue with them